

ABSTRACT

A novel glycoprotein having (a) a molecular weight of approximately 60 kDa and (b) a ratio of a carbohydrate content to a protein content of 16.4:1.0 (carbohydrate:protein) is disclosed. The glycoprotein can be prepared by (1) extracting *Tricholoma matsutake* with an alkaline solution or hot water, (2) adsorbing the resulting extract by an anion exchange resin, (3) eluting the adsorption fraction from the anion exchange resin with an eluting solution, and (4) obtaining a fraction having a molecular weight of 50 to 70 kDa by gel filtration. The glycoprotein is useful as the active ingredient for an immune enhancing agent, an agent for promoting a recovery from stress, or an antitumor agent.